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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/724,538	11/28/2000	Daniel D. Shoemaker	9301-123	7044
20583	7590	03/22/2004	EXAMINER	
JONES DAY 222 EAST 41ST STREET NEW YORK, NY 10017			LU, FRANK WEI MIN	
			ART UNIT	PAPER NUMBER
			1634	

DATE MAILED: 03/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/724,538

Applicant(s)

SHOEMAKER ET AL.

Examiner

Frank W Lu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed on 12/19/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-34,36,45,46,86-90,157-181,183,212,213,263-267 and 280-292 is/are pending in the application.
- 4a) Of the above claim(s) 46,88,212,213,266 and 267 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-34,36,45,86,87,89,90,157-181,183,263-265 and 280-292 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 01 April 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 19, 2003 has been entered. Rejection and/or objection not reiterated from the previous office action are hereby withdrawn in view of applicant's amendment filed on November 3, 2003. The claims pending in this application are claims 1, 4-34, 36, 45, 46, 86-90, 157-181, 183, 212, 213, 263-267, and 280-292 wherein claims 46, 88, 212, 213, and 267 are non-elected claims due to species election. Therefore, claims 1, 4-34, 36, 45, 86, 87, 90, 157-181, 183, 263-266 and 280-292 will be examined.

Specification

2. The substitute specification filed on November 5, 2003 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because a clean copy of the substitute specification has not been supplied. Furthermore, there is no Figure 4c in the Drawings.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 1, 4-34, 36, 45, 86, 87, 90, 157-181, 183, 263-266 and 280-292 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 1 recites the limitation “measuring the expression level of each of a plurality of different variants of an exon in said at least one gene” in the claim. There is insufficient antecedent basis for this limitation in the claim since, before this phrase, the claim does not mention that an exon in at least one gene has a plurality of different variants. Please clarify.

6. Claim 1 is rejected as vague and indefinite. Since the first part of the claim indicates measuring the expression levels of **a plurality of different individual exons** or different individual multiexons in each of a plurality of different genes while the second part of the claim indicates that said measuring comprises measuring the expression level of each of a plurality of different variants of **an exon** in said at least one gene, the first part and the second part of the claim does not correspond each other. Please clarify.

7. Claim 1 is rejected as vague and indefinite because it is unclear what means “each of said plurality of different variants being a form of said exon”. Does this phrase mean that each of said plurality of different variants is in said exon? Please clarify.

8. Claim 10 is rejected as vague and indefinite. Claim 1 requires measuring the expression level of each of said plurality of different variants in a cell sample. However, the array recited in claim 10 does not contain probes that can detect each of said plurality of different variants in a cell sample. Therefore, claim 1 and claim 10 do not correspond each other. Please clarify.

9. Claims 36 and 183 are rejected as vague and indefinite because it is unclear what kind of expression level can be considered as “abundance”.

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10. Claim 157 is rejected as vague and indefinite. Claim 1 requires measuring the expression level of each of said plurality of different variants in a cell sample. However, the array recited in claim 157 does not contain probes that can be used to detect each of said plurality of different variants in a cell sample. Therefore, claim 1 and claim 157 do not correspond each other. Please clarify.

11. Claim 263 is rejected as vague and indefinite because it is unclear what means “the longest variant”. Is the length of the largest variant different from said plurality of different variants of said exon? Please clarify.

12. Claim 264 is rejected as vague and indefinite because it is unclear what means “a sequence spanning the splice junction between a different variant of said exon having a plurality of different variants and a neighboring exon”. Since it is known in the art that a splice junction is a location between two exons, does this phrase mean a sequence spanning the splice junction between said exon having a plurality of different variants and a neighboring exon? Please clarify.

13. Claim 284 is rejected as vague and indefinite because it is unclear what means “one or more exon specific probes of different nucleotide sequences for each of a plurality of different genes in the genome of said organism”. Does this phrase mean one or more exon specific probes comprising different nucleotide sequences for each of a plurality of different genes in the genome of said organism. Please clarify.

14. Claims 284 and 285 are rejected as vague and indefinite because it is unclear what means “each of said variants being a form of said exon generated using a different 3’ or 5’ splice

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junction of said exon". Does this phrase mean that each of said variants is a said exon variant generated by splicing of said exon. Please clarify.

15. Claims 284 and 285 are rejected as vague and indefinite because it is unclear what means "each of said variant junction probes being a probe specific to a junction region of said variant and a neighboring exon". Does this phrase mean each of said variant junction probes being a probe specific to a junction region of said exon having said variant and a neighboring exon. Please clarify.

Conclusion

16. No claim is allowed.

17. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CAR § 1.6(d)). The CM Fax Center number is either (703) 308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Lu, Ph.D., whose telephone number is (571)272-0746.

The examiner can normally be reached on Monday-Friday from 9 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion, can be reached on (571)272-0782.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Chemical Matrix receptionist whose telephone number is (703) 308-0196.



Frank Lu

PSA

March 17, 2004

FRANK LU
PATENT EXAMINER